

Megha S Kumar

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Career Objective

To be a part of an organization which would provide a platform to improve my skills and establish a successful career in the field of mechanical engineering.

Educational Qualifications

Sl.No.	Course	Institution	University/Board	Year	Percentage
1	Bachelor of Engineering (Mechanical)	Dayananda Sagar College of Engineering, Bangalore	Visvesvaraya Technological University	2013-2017	75.53%
2	12th	Christ Junior College, Bangalore	Karnataka State Board	2011-2013	92.33%
3	10th	Bishop Cotton Girls High School, Bangalore	ICSE	2010-2011	90.85%

Internships and Trainings

- Internship at **Gas Turbine Research Establishment (GTRE), Defence Research and Development Organisation (DRDO), Bangalore**
Area: Testing and characterization of materials for Aero-Engine design
Activities: Fatigue and Tensile testing, Foreign body Ingestion Impact test
Description: Testing of Titanium and Nickel based alloys used in fan blades and compressor blades of aero-engine
Study the impact of foreign body on stationary fan blade Ti-64 specimen
Duration: 1 month
- Internship at **Bharat Earth Movers Limited (BEML), Bangalore**
Area: Fabrication of Underframe of Metro car body with different welding process operations
Activities: Welding Procedure Specifications (WPS), Procedure Qualification Record (PQR), Inspection, Section test of weld samples
Description: Plan for improvement of Robot MIG Arc Spot welding of stainless steel Keystone plate onto the Underframe of the metro car body
Duration: 1 month
- Short term certificate course on
 - Kaizen-The Engineers Philosophy for Success, as a part of Change the Attitude and Mindset (CAM) of Engineers campaign
 - Entrepreneurship Awareness Camp by Innovation and Entrepreneurship Development Centre
 - Dynamic Skills Integrated Program by Centre for Innovation and Leadership (CIL)

Research Projects and Papers

Research Project (Final Year BE)	Synthesis and Characterization of Industrial Waste Reinforced Aluminium Surface Composites by Friction Stir Processing (FSP) Sponsored by: Karnataka State Council for Science and Technology (KSCST) Description: <ul style="list-style-type: none">• Utilization of Fly Ash, an industrial by-product to incorporate as an economic reinforcement particle• FSP a novel surface modification technique used to prepare Aluminium reinforced surface composite• Optimization of FSP process parameters by Taguchi experiment design technique• Testing and characterization of prepared surface composite samples
Research Paper	Optimization and Characterization of Industrial Waste Reinforced Aluminium Surface Composites using Friction Stir Processing
Journal	Under review at Materials Today Proceedings, Elsevier Publications

Seminars

Seminar (Final year BE)	Foreign Object Damage (FOD) in Aero-Engine Description: <ul style="list-style-type: none">• Problems associated with FOD• Significance of Bird strikes on engine components• Need for prevention of FOD and requirement of FOD resistant material for damage control
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Technical Skills

- Design software: AutoCad, Fusion 360, Solid Edge, Catia
- Analysis software: Ansys
- Statistical Quality Control (SQC) and Total Quality Management (TQM)

Professional Body Membership

American Society of Mechanical Engineers (ASME)
International Association of Engineers (IAENG)
Indian Society of Mechanical Engineers (ISME)
The Institute of Indian Foundrymen (IIF)

Areas of Interest

- Volunteering: The Energy and Resources Institute (TERI)
Children's Movement for Civic Awareness (CMCA)
- Travelling, reading books and creative arts

Languages known: English, Hindi, Kannada, French, German

Key Strengths: Adaptability and team work, Positive attitude, Creative skills